

AN APPLICATION FOR QUALITY MANAGEMENT OF DIGITAL GEOSPATIAL DATA IN SURVEY DEPARTMENT OF SRI LANKA

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Maps of all kinds are fundamentally important for modern society. Any map is a product of human endeavor and as such may be subject to unwitting errors. But with the typical errors, quality of digital map is highly decreased and can directly influence the user. Maps are used by many people for planning, forecasting, developments, researches and constructions etc. As Survey Department of Sri Lanka is the national agency for any national surveying and mapping projects, the capability of producing high quality maps with minimum of errors is a need. GIS is a computer system designed to compare, store, manipulate, analyze, manage and present all types of geographical data. Therefore, this project is aimed to introduce a complete GIS based method for errors checking in a digital data are being made by Survey Department.

1:10,000 digital data were collected from Survey Department of Sri Lanka. The project have been introduced mainly three steps to be followed by a newly created modeler before finalized the data. Those steps are removing errors of all lines, points and polygons feature classes. The model was built using ArcGIS 10.2.

Finally the results gained from the project are in good quality computer based maps which will be used by many people/agencies for any type of spatial data related analysis. It is less time consuming method compared with the presently practice method, which is manual editing. Therefore, the time consumption get reduced. At the same time this proposed model can be improved to have a quality data set of 1:5,000 data models.